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Medical Director's Update for Base Station Physicians' Committee May, 2011

Off Load Delays: Field providers recognizing the likelihood of an off-load delay upon arriving at the ED should contact the charge nurse to assist with transfer of the patient. It is important the hospital understand you are waiting for a bed, in particular, if you are aware of an impact on the field due to multiple units experiencing off load delay. For situations with many units waiting at an ED, or waiting for prolonged times, contact the EMS duty officer so they may evaluate the situation and cause.

An article on the "Rise of Regional No-diversion Policies" appears in this month's Annals of Emergency Medicine in the News and Perspective section. The article describes the "ping-pong" effect that occurs with diversion, and outlines no diversion policies in Massachusetts. The impact of patient boarders in the ED is covered as well.

Protocols: New protocols are finished and in-services close to beginning. Protocol changes include fluid boluses for suspected volume depletion, and a target blood pressure of 80 mm Hg for suspected abdominal aneurysms, consistent with avoidance of unnecessarily high pressures and use of crystalloid fluid such as normal saline in persons who may be bleeding heavily. The allergy/anaphylaxis protocol has been separated into stepwise sections from mild to acute anaphylaxis, and Atrovent added. Hypoglycemia is now defined as <60 mg/dL. In Altered Mental Status use of naloxone is simplified, and Versed doses and times between administration shortened and better defined.

Use of the 12-lead and nitroglycerin in chest pain is better defined. Pacing is moved to Standing Order, including the use of pain medications in that setting. An option for amiodarone is added for "perfusing" ventricular tachycardia and post-conversion. Patients who are resuscitated from cardiac arrest with an initial rhythm of ventricular fibrillation or ventricular tachycardia, but who remain unconscious, will be directed to a STEMI receiving center. This will allow reperfusion with percutaneous coronary interventions (angioplasty), as well as use of therapeutic hypothermia. Evidence suggests that patients may benefit from post

arrest hypothermia, and we will employ moderate hypothermia until more evidence is gained from controlled trials. Atropine and sodium bicarbonate are deleted from the PEA protocol.

The use of heat for jellyfish stings, similar to its use in stingray wounds now, will be added to the protocol as an option, based on recent evidence and ACLS. Fluid challenges for heat exhaustion are newly added. Use of shunts and fistulas for access will be limited to immediate need for therapy. CPAP is added for drowning.

Activated charcoal use will be limited to ingestions within 60 minutes. Cyanide antidotes amyl nitrite, sodium thiosulfate, or hydroxocobalamin will be added to the protocols for use if the medications are available at the site of the poisoning. They will not be in the ALS inventory.

Rapid diagnosis and treatment of sepsis is receiving attention in hospitals. To help early diagnosis and notification of the receiving hospital, criteria are established for identification of possible sepsis, and SO fluid boluses are added.

For trauma a target blood pressure of 80 mm Hg is established. Again, the thinking is to avoid raising the blood pressure and increasing blood loss while infusing saline, washing out coagulation factors, and dislodging clots trying to form.

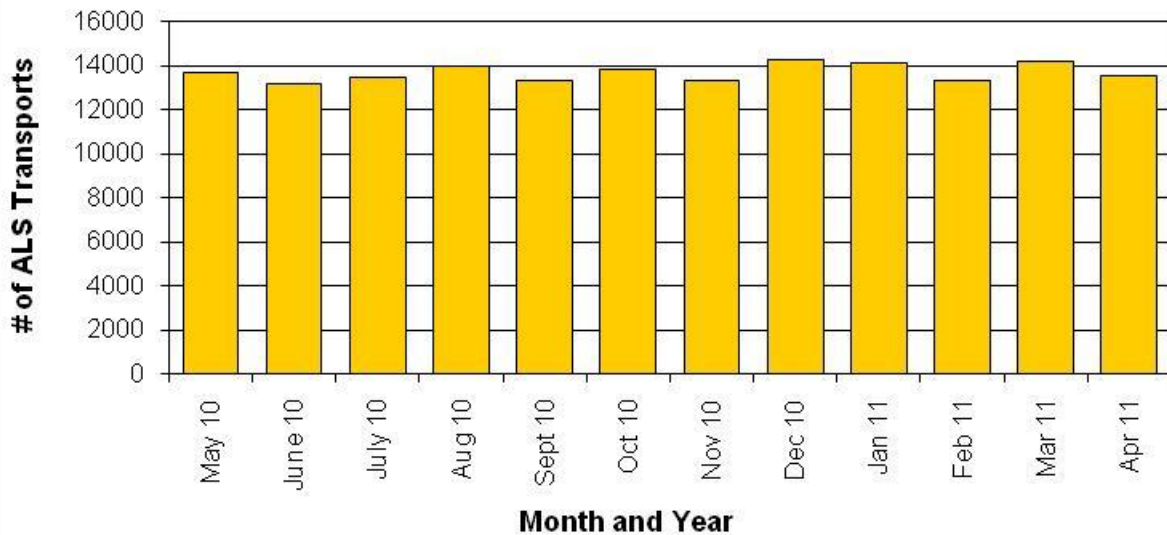
Morphine administration is changed to try and improve pain control, with the addition of Zofran for narcotic induced nausea.

For pediatrics, use of albuterol and nebulized epinephrine are better defined. Also added is a criterion of neuro deficit for instituting spinal stabilization, and the starting of fluids in trauma patients en-route.

Please let us know of any suggestions.

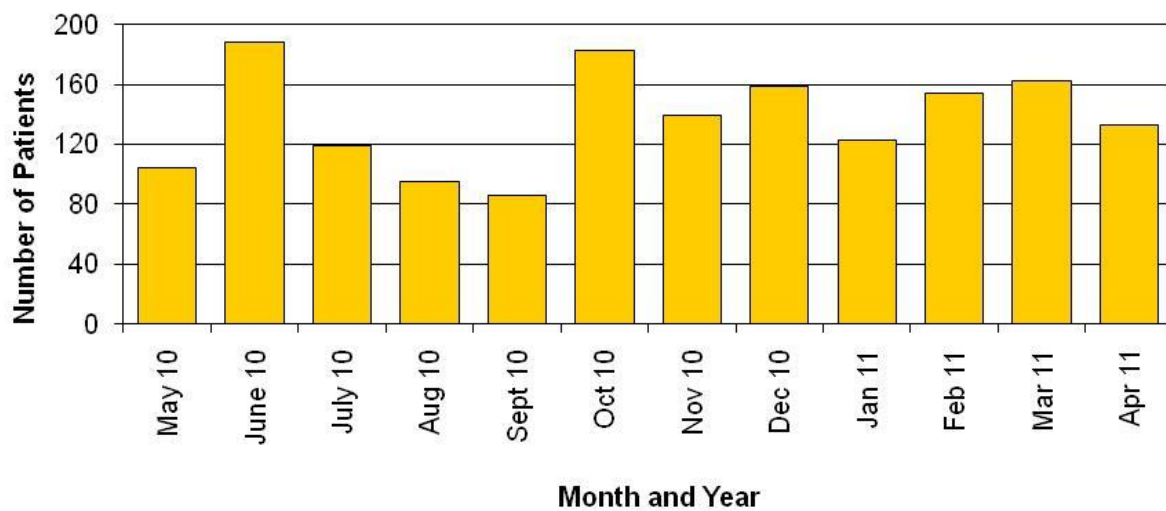
CEMSIS: The state data system already has about one half million records. This should give us a better picture of EMS around the state. Thanks for your help on data collection.

Number of ALS Transports, County of San Diego, May 2010 - Apr 2011

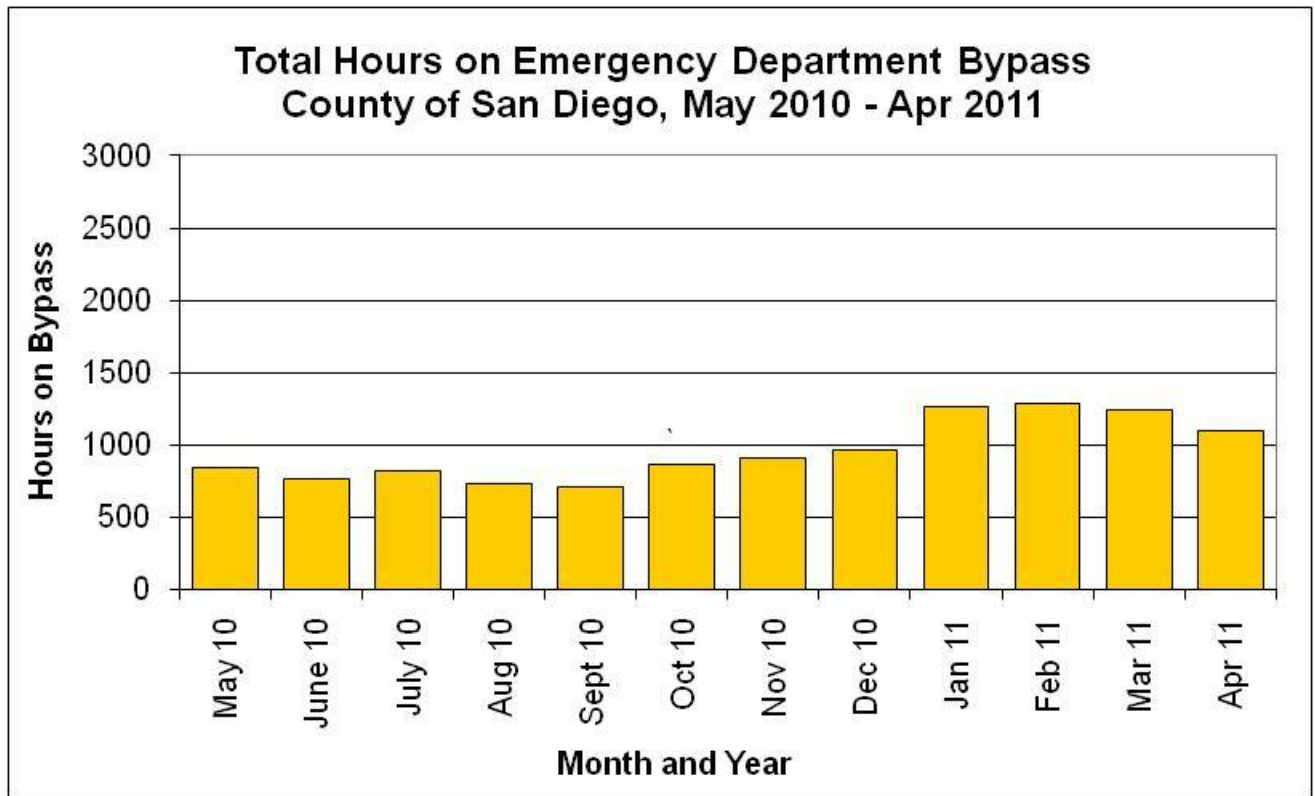


Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, May 2010 – Apr 2011 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other

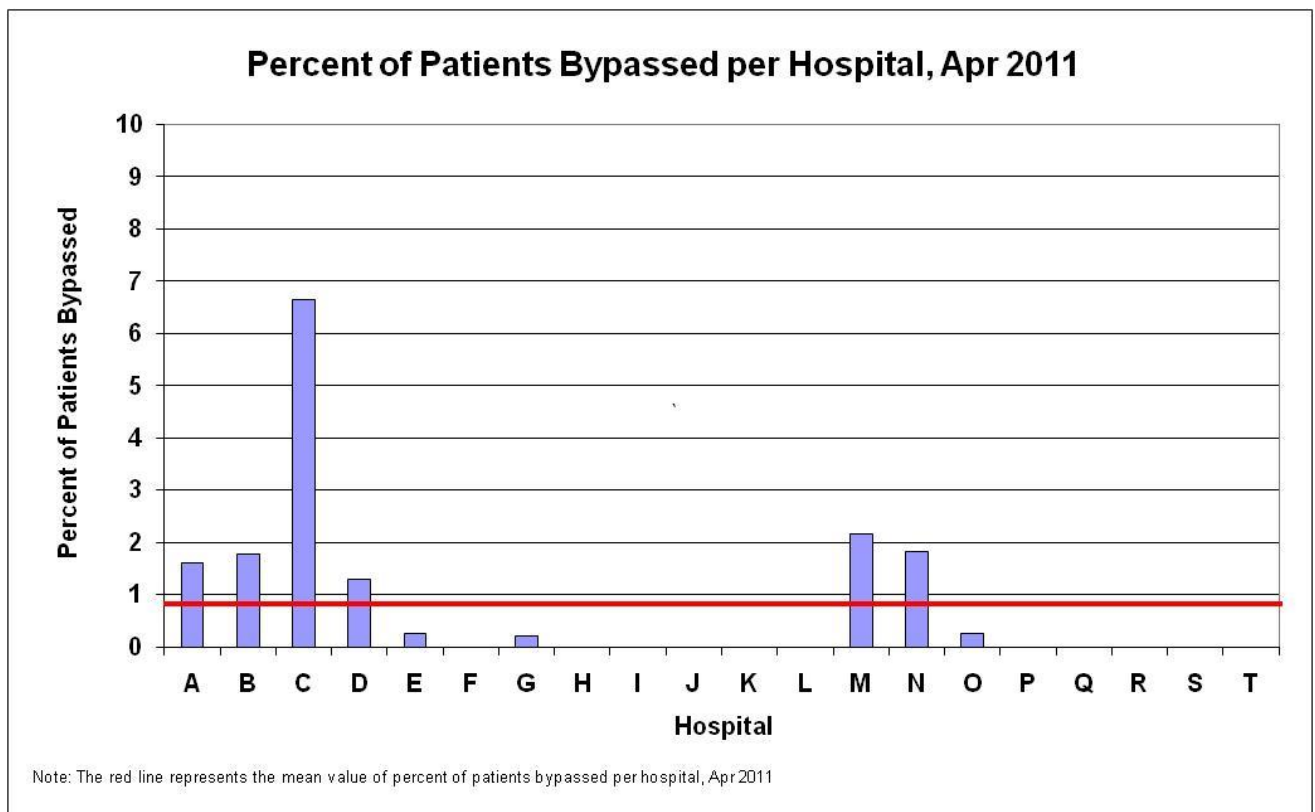
Number of Patients who Bypassed the Requested Hospital, County of San Diego, May 2010 - Apr 2011



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, May 2010 – Apr 2011 Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other

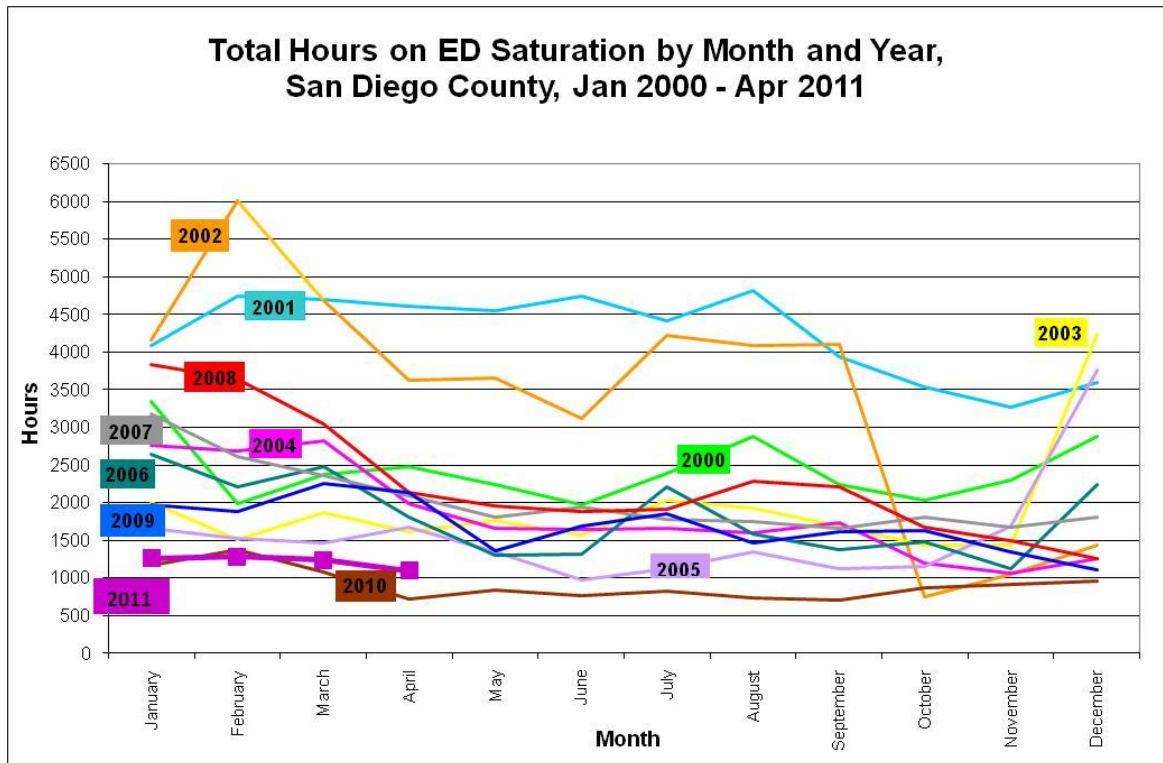


Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, May 2010 – Apr 2011

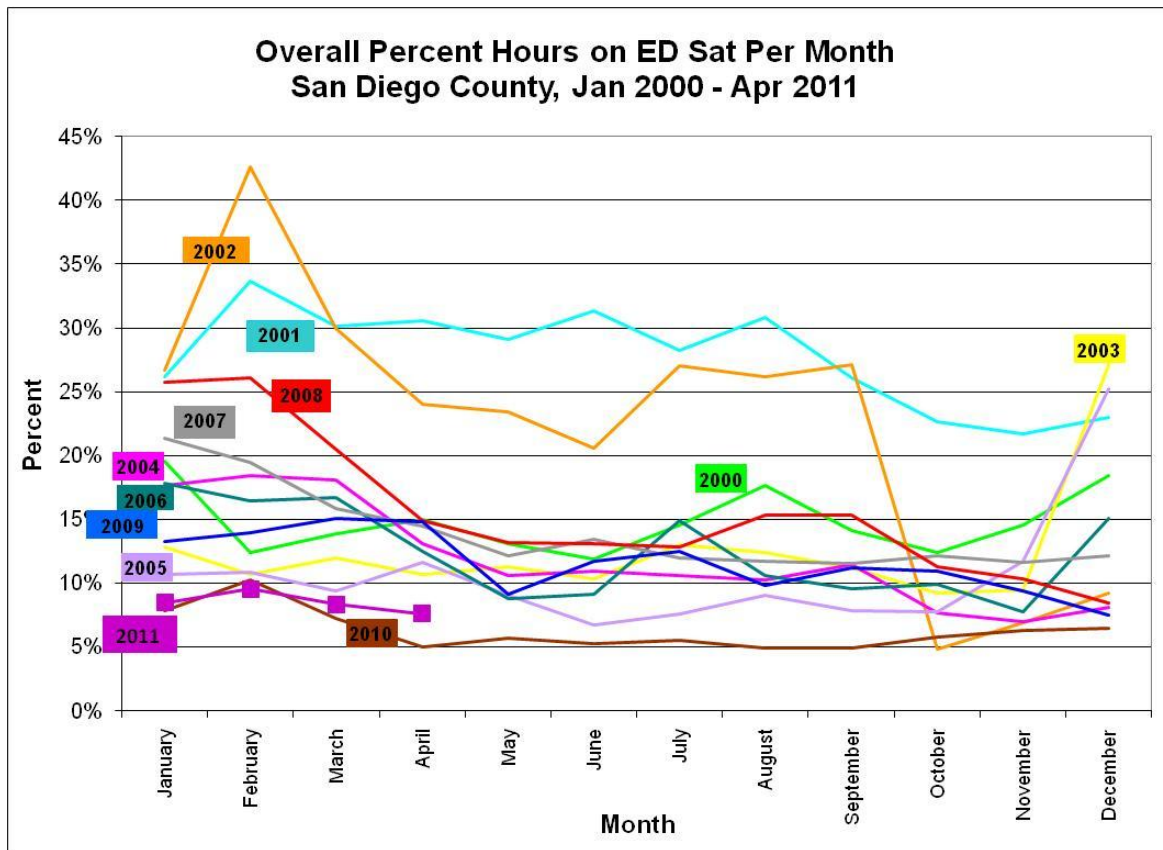


Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Apr 2011

Note: Numbers based on Run Outcomes of Transport by Unit and Transport by Other

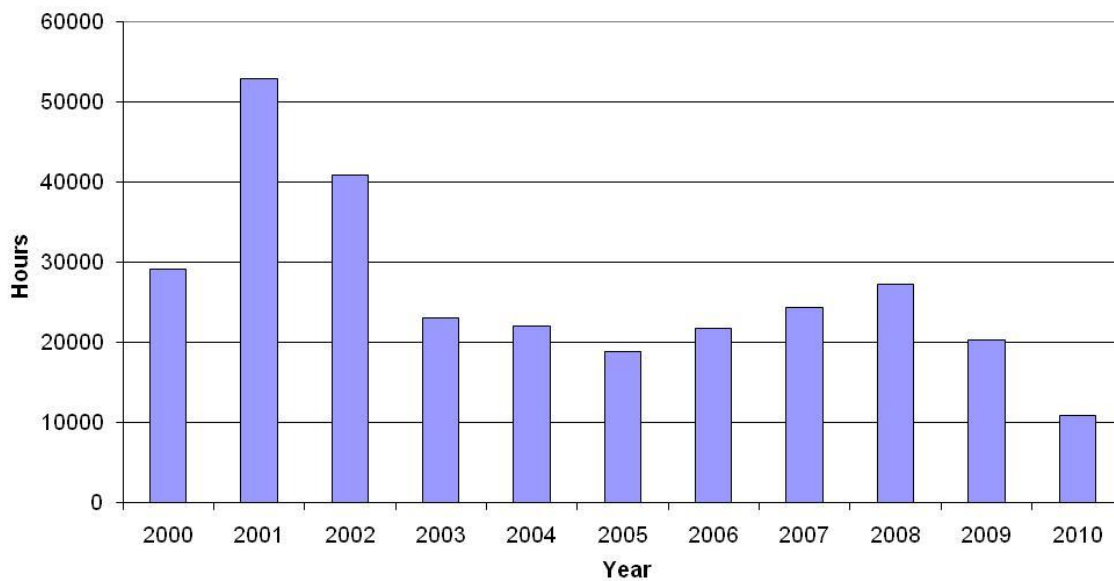


Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Jan 2000 – Apr 2011



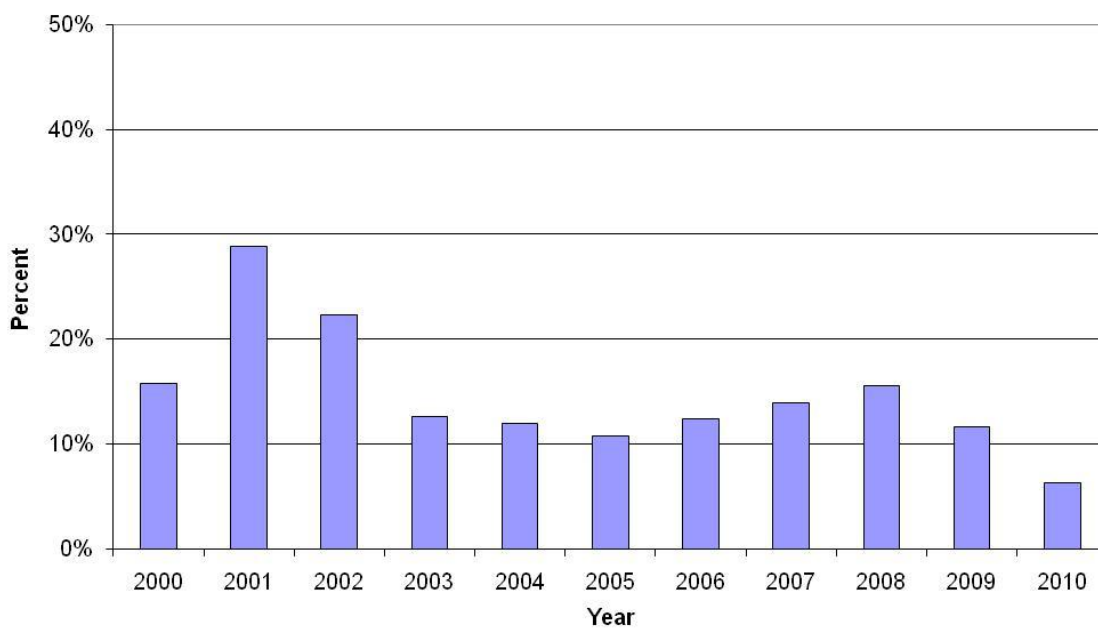
Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, Jan 2000 – Apr 2011

Total Hours on ED Saturation by Year, San Diego County, 2000-2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, 2000 – 2010

Overall Percent Hours on ED Saturation by Year, San Diego County, 2000-2010



Source: County of San Diego, Health and Human Services Agency, Emergency Medical Services, MICN Records, 2000 – 2010